

an8716 sequence listing.txt

SEQUENCE LISTING

<110> Bayer CropScience AG

<120> Method of identifying fungicidally active compounds based on fungal mevalonate kinases

<130> BCS 03-3035

<160> 2

<170> PatentIn version 3.1

<210> 1

<211> 1341

<212> DNA

<213> Ustilago maydis

<220>

<221> CDS

<222> (1)..(1341)

<223>

<400> 1

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tcg	gct	cag	gat	cac	ccg	ccg	ccg	tcg	tcg	gtg	gtt	gtc	agt	gcg	cct	96
Ser	Ala	Gln	Asp	His	Pro	Pro	Pro	Ser	Ser	Val	Val	Val	Ser	Ala	Pro	
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ggc	aag	gtg	atc	ctt	ttc	ggt	gag	cac	gca	gtg	gtg	cat	ggt	att	act	144
Gly	Lys	Val	Ile	Leu	Phe	Gly	Glu	His	Ala	Val	Val	His	Gly	Ile	Thr	
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gct	gtc	gcc	gcc	tcg	gtg	gcg	ctg	cga	tgc	tac	gct	aac	gta	tcg	cca	192
Ala	Val	Ala	Ala	Ser	Val	Ala	Leu	Arg	Cys	Tyr	Ala	Asn	Val	Ser	Pro	
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cga	gag	gat	ggc	aag	att	tcg	ctc	gat	ttg	cct	gat	ctc	ggc	gtg	atc	240
Arg	Glu	Asp	Gly	Lys	Ile	Ser	Leu	Asp	Leu	Pro	Asp	Leu	Gly	Val	Ile	
65				70					75					80		
cac	act	tgg	aac	atc	gcc	gat	ctt	cct	tgg	tct	gct	gtg	cct	aaa	tcc	288
His	Thr	Trp	Asn	Ile	Ala	Asp	Leu	Pro	Trp	Ser	Ala	Val	Pro	Lys	Ser	
			85					90					95			
att	caa	ggt	ggt	ggc	gcc	gta	cct	gac	tcg	ctc	gac	aag	acg	ctt	att	336
Ile	Gln	Gly	Gly	Gly	Ala	Val	Pro	Asp	Ser	Leu	Asp	Lys	Thr	Leu	Ile	
			100					105					110			
ggc	gcc	atc	gaa	aag	gtg	gtg	ggc	gac	acg	gtc	aac	gag	agc	gaa	aga	384
Gly	Ala	Ile	Glu	Lys	Val	Val	Gly	Asp	Thr	Val	Asn	Glu	Ser	Glu	Arg	
		115					120					125				
agc	cat	gct	gct	tcg	atc	gcc	ttt	ctg	gtg	ctt	tac	atg	tgc	atc	gcc	432
Ser	His	Ala	Ala	Ser	Ile	Ala	Phe	Leu	Val	Leu	Tyr	Met	Cys	Ile	Ala	
	130					135					140					

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ggt Gly 145	cag Gln	gct Ala	gat Asp	gcg Ala	cgc Arg 150	gct Ala	cag Gln	gca Ala	ttt Phe	gtg Val 155	ctg Leu	cggt Arg	tcg Ser	gct Ala	ctg Leu 160	480
ccc Pro	atc Ile	ggt Gly	gca Ala	gga Gly 165	ctc Leu	ggc Gly	tca Ser	agc Ser	gcc Ala 170	gcg Ala	ctc Leu	agc Ser	tcg Ser	tgc Cys 175	ctc Leu	528
gct Ala	gcg Ala	gcg Ala	ctc Leu 180	acc Thr	atc Ile	ctc Leu	tat Tyr	ggt Gly 185	cgc Arg	att Ile	ccc Pro	gct Ala	ccg Pro 190	ggc Gly	agc Ser	576
gaa Glu	ctg Leu	tca Ser 195	gct Ala	gag Glu	cac His	tcg Ser	aca Thr 200	cac His	atc Ile	aac Asn	gaa Glu	tgg Trp 205	gcc Ala	ttt Phe	ttg Leu	624
tct Ser	gaa Glu 210	aag Lys	gta Val	att Ile	cac His	ggc Gly 215	acc Thr	ccc Pro	tcg Ser	ggt Gly	gtt Val 220	gac Asp	aac Asn	acg Thr	gtg Val	672
gct Ala 225	gtt Val	cat His	ggc Gly	gga Gly	gcg Ala 230	atc Ile	gct Ala	ttc Phe	act Thr	cggt Arg 235	gct Ala	cac His	cca Pro	agc Ser	aac Asn 240	720
acg Thr	ctc Leu	aca Thr	gcc Ala	aac Asn 245	aag Lys	atg Met	aac Asn	aag Lys	ctc Leu 250	aaa Lys	ggc Gly	ttc Phe	tct Ser	tcg Ser 255	ttc Phe	768
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gcg Ala	gct Ala 290	ctc Leu	gct Ala	cga Arg	atc Ile	cag Gln 295	acg Thr	atc Ile	gcc Ala	gat Asp	tcg Ser 300	gcc Ala	cag Gln	ctc Leu	gtg Val	912
ctc Leu 305	act Thr	ggc Gly	aac Asn	tcg Ser	ggt Gly 310	ctc Leu	tct Ser	cggt Arg	tcc Ser	gag Glu 315	caa Gln	gtt Val	gca Ala	cag Gln	ctt Leu 320	960
cggt Arg	gaa Glu	ctg Leu	atc Ile	aag Lys 325	cag Gln	aac Asn	cat His	agc Ser	gaa Glu 330	ctt Leu	gtt Val	ggg Gly	ctc Leu	gag Glu 335	gta Val	1008
tcg Ser	cac His	gct Ala	tcg Ser 340	ctg Leu	gag Glu	ttg Leu	atc Ile	aag Lys 345	aac Asn	aag Lys	acc Thr	gag Glu	tcg Ser 350	ttt Phe	gca Ala	1056
ccc Pro	gat Asp	cag Gln 355	ctg Leu	gct Ala	act Thr	aag Lys	ctc Leu 360	aca Thr	ggt Gly	gcc Ala	gga Gly	gga Gly 365	gga Gly	gga Gly	tgt Cys	1104
gca Ala	gtt Val 370	aca Thr	ctg Leu	ctg Leu	ccg Pro	gac Asp 375	gac Asp	ttt Phe	gag Glu	gag Glu	gag Glu 380	aag Lys	gtg Val	aag Lys	gag Glu	1152
ctg Leu 385	atg Met	agc Ser	gag Glu	ctg Leu	gag Glu 390	aat Asn	gct Ala	ggc Gly	ttt Phe	aag Lys 395	tgc Cys	tac Tyr	gag Glu	acc Thr	aga Arg 400	1200
gtg Val	gga Gly	ggt Gly	gac Asp	ggc Gly	ttc Phe	ggc Gly	gtc Val	aag Lys	ctt Leu	ctg Leu	cag Gln	gac Asp	gaa Glu	cag Gln	gag Glu	1248

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405		410		415	
gag gcc gag gcc aag ctg cga ttc aag gaa gcc aac gtg agc aac gag					1296
Glu Ala Glu Ala Lys Leu Arg Phe Lys Glu Ala Asn Val Ser Asn Glu					
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ctg gct gtg tgg gct gat gag ctt gct ggt tgg gta ttt gcc tga					1341
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<210> 2

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<212> PRT

<213> Ustilago maydis

<400> 2

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Gly	Lys	Val	Ile	Leu	Phe	Gly	Glu	His	Ala	Val	Val	His	Gly	Ile	Thr
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Ala	Val	Ala	Ala	Ser	Val	Ala	Leu	Arg	Cys	Tyr	Ala	Asn	Val	Ser	Pro
	50					55					60				
Arg	Glu	Asp	Gly	Lys	Ile	Ser	Leu	Asp	Leu	Pro	Asp	Leu	Gly	Val	Ile
65					70					75					80
His	Thr	Trp	Asn	Ile	Ala	Asp	Leu	Pro	Trp	Ser	Ala	Val	Pro	Lys	Ser
			85						90					95	
Ile	Gln	Gly	Gly	Gly	Ala	Val	Pro	Asp	Ser	Leu	Asp	Lys	Thr	Leu	Ile
		100					105						110		
Gly	Ala	Ile	Glu	Lys	Val	Val	Gly	Asp	Thr	Val	Asn	Glu	Ser	Glu	Arg
	115						120				125				
Ser	His	Ala	Ala	Ser	Ile	Ala	Phe	Leu	Val	Leu	Tyr	Met	Cys	Ile	Ala
	130					135					140				
Gly	Gln	Ala	Asp	Ala	Arg	Ala	Gln	Ala	Phe	Val	Leu	Arg	Ser	Ala	Leu
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Pro	Ile	Gly	Ala	Gly	Leu	Gly	Ser	Ser	Ala	Ala	Leu	Ser	Ser	Cys	Leu
				165					170					175	
Ala	Ala	Ala	Leu	Thr	Ile	Leu	Tyr	Gly	Arg	Ile	Pro	Ala	Pro	Gly	Ser

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Glu Leu Ser Ala Glu His Ser Thr His Ile Asn Glu Trp Ala Phe Leu
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Ser Glu Lys Val Ile His Gly Thr Pro Ser Gly Val Asp Asn Thr Val
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Ala Val His Gly Gly Ala Ile Ala Phe Thr Arg Ala His Pro Ser Asn
225                                     230                                     235                                     240

Thr Leu Thr Ala Asn Lys Met Asn Lys Leu Lys Gly Phe Ser Ser Phe
245                                     250                                     255

Arg Phe Leu Leu Val Asp Ser Cys Val Gly Arg Glu Gly Lys Lys Leu
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Ile Ala His Val Ala Ala Gln Lys Glu Ser Glu Pro Thr Arg Val Asn
275                                     280                                     285

Ala Ala Leu Ala Arg Ile Gln Thr Ile Ala Asp Ser Ala Gln Leu Val
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Leu Thr Gly Asn Ser Gly Leu Ser Arg Ser Glu Gln Val Ala Gln Leu
305                                     310                                     315                                     320

Arg Glu Leu Ile Lys Gln Asn His Ser Glu Leu Val Gly Leu Glu Val
325                                     330                                     335

Ser His Ala Ser Leu Glu Leu Ile Lys Asn Lys Thr Glu Ser Phe Ala
340                                     345                                     350

Pro Asp Gln Leu Ala Thr Lys Leu Thr Gly Ala Gly Gly Gly Gly Cys
355                                     360                                     365

Ala Val Thr Leu Leu Pro Asp Asp Phe Glu Glu Glu Lys Val Lys Glu
370                                     375                                     380

Leu Met Ser Glu Leu Glu Asn Ala Gly Phe Lys Cys Tyr Glu Thr Arg
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Glu Ala Glu Ala Lys Leu Arg Phe Lys Glu Ala Asn Val Ser Asn Glu
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Leu Ala Val Trp Ala Asp Glu Leu Ala Gly Trp Val Phe Ala
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